

# Work Order ID 63274

Wednesday, October 27, 2010 9:07:34 AM

Page 1

Item ID: D212-725-1-159F

Accept

Setup Start

Revision ID:

Stop

Item Name: Clip Angle Oil Cooler

Start Date: 10/27/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 11/30/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

Date: 10-10-27 Tooling:

Date:



Run Start

QC:

Date: SPC (Y/N):

Date:

Stop

| Sequence ID/<br>Work Center ID  | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|---|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr  | Revision Nbr             |                      |         |        |              |               |               |                  |                |
| D212-725-1  | D                        |                      |         |        |              |               |               |                  |                |
| 100   |                          | 0.00                 |         |        |              |               |               |                  |                |
|    |                          |                      |         |        |              |               |               |                  |                |
| Waterjet  | Memo                     | 0.00                 |         |        |              |               |               |                  |                |
| FLOW CNC Waterjet   | 1-Cut as per Dwg         |                      |         |        |              |               |               |                  |                |
| 2024 .032   | Dwg Rev: <u>8</u>        |                      |         |        |              |               |               |                  |                |
|   | Prog Rev: <u>0</u>       |                      |         |        |              |               |               |                  |                |
|   | 2-Deburr if necessary    |                      |         |        |              |               |               |                  |                |
| 110   |                          | 0.00                 |         |        |              |               |               |                  |                |
|  |                          |                      |         |        |              |               |               |                  |                |
| QC  | Memo                     | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control   |                          |                      |         |        |              |               |               |                  |                |

10-10-28

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10-10-28

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 63274

Wednesday, October 27, 2010 9:07:34 AM

Page 2

Item ID: D212-725-1-159F

Revision ID:

Item Name: Clip Angle Oil Cooler

Start Date: 10/27/2010 Start Qty: 2.00

Required Date: 11/30/2010 Req'd Qty: 2.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \_\_\_\_\_  
Stop \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description                    | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120                            | QC8- Inspect parts - second check           | 0.00                 |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |
| 121                            | Hand Finish                                 |                      |         |        |              |               |               |                  |                |
| 122                            | Ac 3  |                      |         |        |              |               |               |                  |                |
| 130                            | Identify as per dwg & Stock Location: 385   | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | ***FLAT PATTERN ONLY***                     |                      |         |        |              |               |               |                  |                |
| 140                            | QC21- Final Inspection - Work Order Release | 0.00                 |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

10/10/28

2 BL 10-10-28.

Card 1/29 (2)

10/10/29 MF 10-10-29

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                                |                                 |                |                           |                       |                          |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action<br>Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, October 27, 2010 9:07:38 AM

Page 1

Work Order ID: 63274



Parent Item: D212-725-I-159F



Parent Item Name: Clip Angle Oil Cooler

Start Date: 10/27/2010

Required Date: 11/30/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.07.19 new issue DD verf:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M2024T3S.032                    |                        | Purchased     | No          |                     |                  | 100             | sf                 | 72.0000        | 0.056       | 0.117895     |               |                |        |



2024-T3 .032 sheet



PIC-10-28

Location

Loc Qty

Loc Code

MAT22

72

105555

3

111699

4

113189

65

13189

②

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

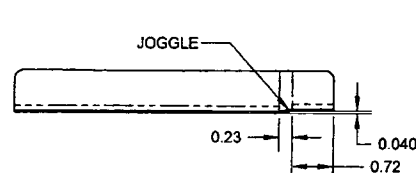
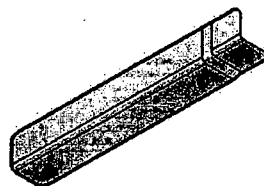
**NOTE:** Date & initial all entries

0212-725-1-159K

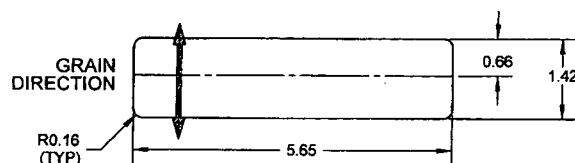
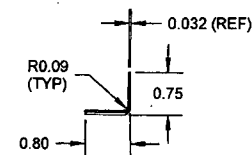
|   |               |   |           |
|---|---------------|---|-----------|
| X | First Article | X | Prototype |
|---|---------------|---|-----------|

|                        |                       |                     |
|------------------------|-----------------------|---------------------|
| Measured by: <u>HB</u> | Audited by: <u>S</u>  | Prototype Approval: |
| Date: <u>10-10-20</u>  | Date: <u>10/10/20</u> | Date:               |

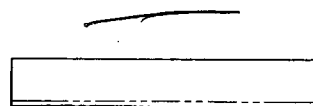
H:\FORMS\Quality Assurance\approved QA\FAI revD



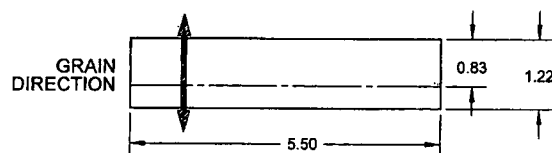
**D212-725-1-159F ANGLE**  
(MAKE FROM D212-725-1-159F)



**D212-725-1-159F FLAT PATTERN**



**D212-725-1-161F STIFFENER**  
(MAKE FROM D212-725-1-161F)



**D212-725-1-161F FLAT PATTERN**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 63274

*BB 10-10-27*

**RELEASED**  
2009-10-28

**D212-725-1-159/161NOTES:**

- 1) MATERIAL: 2024-T3 SHEET 0.032 THICK PER QQ-A-250/4 OR AMS 4037 (REF. DART SPEC. M2024T3S.032)
- 2) FINISH: ACID ETCH, ALODINE 1200 OR 1201 PER MIL-C-5541 AND/OR PRIME PER AIRCRAFT MAINTENANCE MANUAL
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: N/A

|            |          |   |                |
|------------|----------|---|----------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |                |
| DRAWN      | RF       |   |                |
| CHECKED    | DS       | DRAWING NO.   | REV. D         |
| MFG. APPR. | N/A      | <b>D212-725-1</b>   | SHEET 54 OF 67 |
| APPROVED   | #        | TITLE   | SCALE          |
| DE APPR.   | #        | <b>212S DETAIL PARTS</b>  | 1:2            |
| DATE       | 08.03.14 | COPYRIGHT © 2006 BY DART AEROSPACE LTD<br><small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |                |



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                                |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action<br>Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries